

# SIGNAL PROCESSING DEVICE CAPABLE OF ENHANCING CORRECTNESS OF FEED- BACK SIGNALS

## Abstract

A signal processing device for processing a passband signal to generate an equalized signal includes a passband adaptive equalizer for generating the equalized signal according to the passband signal, including at least one feed-forward equalizer (FFE) and one feedback equalizer (FBE), and a multilevel quantizer coupled with the passband adaptive equalizer for selectively utilizing a single predetermined threshold or a plurality of multiple predetermined thresholds to quantize the equalized signal in order to generate a sliced signal.